



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/574,189

03/31/2006

Klaus Offterdinger

10191/4429

7463

26646

7590

07/17/2008

KENYON & KENYON LLP  
ONE BROADWAY  
NEW YORK, NY 10004

EXAMINER

THAI, LUAN C

ART UNIT

PAPER NUMBER

2891

MAIL DATE

DELIVERY MODE

07/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/574,189	<b>Applicant(s)</b> OFFTERDINGER ET AL.	
	<b>Examiner</b> Luan Thai	<b>Art Unit</b> 2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office action is responsive to the amendment filed April 21, 2008.

Claims 9-16 are pending in this application.

Claims 1-8 have been canceled.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (6,603,183 of record) in view of Oxman et al. (6,395,124 of record) as set forth in the previous Office Action mailed January 10, 2008 and now repeated with some modification in an effort to even more clearly clarify the Office Action.

Regarding claims 9-14 and 16, Hoffman discloses a method for attaching at least one chip (108) in a pre-molded plastic housing substrate (102). The method further comprising: applying an adhesive layer (110) between the chip (108) and the plastic housing substrate (102). Hoffman does not teach the adhesive layer is cured by using radiation of the transmission wavelength through the plastic housing substrate.

Oxman et al. while related to a similar method of attaching an electronic component to a plastic substrate (Col. 2, lines 17+ and Col. 10, lines 23+) teach the use a photocurable adhesive in bonding an electronic component to a plastic transparent substrate and then curing rapidly the

photocurable adhesive by a visible light or near-infrared light through the a plastic transparent substrate (Col. 2, lines 2+, lines 12+, lines 20+, and Col. 6, line 64 to Col. 7, line 14) to minimize the production time (Col. 6, lines 62+).

Although Hoffman lacks an inclusion of curing the adhesive layer through the plastic housing substrate by using radiation of the transmission wavelength, selecting a specific type of known available adhesive and curing method (as disclosed by Oxman), in semiconductor art, for bonding an electronic component to a plastic housing substrate would have been obvious to one of ordinary skill in the art. It would have been obvious to modify Hoffman accordingly in order to provide a suitable adhesive and curing method for bonding the electronic component to the plastic housing substrate.

Regarding claim 15, the Examiner notes that a recitation (e.g. the chip being a micromechanical chip) of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The proposed method of Hoffman and Oxman would have been obvious to be applicable to a micromechanical chip.

### ***Response to Arguments***

**12.** Applicant's arguments filed on 4/21/08 have been fully considered but they are not persuasive. Specifically:

Applicant argues in page 3 of the Remarks, that the overall teachings of Hoffman and Oxman simply would not suggest the asserted combination to one of ordinary skill in the art. In

Art Unit: 2891

response, the examiner point out that Hoffman lacks an inclusion of a photocurable adhesive which is cured through the plastic substrate by a visible light or UV light and Oxman teaches all such lacking limitations. Thus, selecting a specific type of known available adhesive and curing method, as disclosed by Oxman, in semiconductor art, for bonding an electronic component to a plastic substrate would have been obvious to one of ordinary skill in the art.

### ***Conclusion***

**13** Applicant's amendment filed on 4/21/08 has been fully considered but they are not persuasive. Therefore, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**14.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luan Thai whose telephone number is 571-272-1935. The examiner can normally be reached on 8:00 AM - 4:30 PM, Monday to Friday.

Art Unit: 2891

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley W. Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**/Luan Thai/**

**Primary Examiner, Art Unit 2891**

*Luan Thai*

Primary Examiner

Art Unit 2891

July 15, 2008